

REMARKS

The Office Action mailed August 8, 2003, has been received and reviewed. Claims 1 through 7, 9 through 24, and 26 through 44 are currently pending in the application. Claims 1 through 7, 9 through 24, and 26 through 44 stand rejected. Applicants have amended each of claims 1 through 7, 9 through 24, and 26 through 44. All amendments are made without prejudice or disclaimer and no new matter has been added. Support for the amendments of claims 1, 23 and 39 may be found at paragraphs [0042] and [0043], and the corresponding FIGS. 5 and 6 of the specification. Reconsideration of the application as amended herein is respectfully requested.

35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on U.S. Patent No. 6,232,667 to Hultmark et al. in View of U.S. Patent No. 6,064,120 to Cobbley

Claims 1 through 7, 9 through 16, 41, and 42 stand rejected in the Office Action under 35 U.S.C. § 103(a) as assertedly being unpatentable over Hultmark et al. (U.S. Patent No. 6,232,667) in view of Cobbley (U.S. Patent No. 6,064,120). Applicants respectfully traverse this rejection, as hereinafter set forth.

M.P.E.P. 706.02(j) sets forth the standard for a Section 103(a) rejection:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or suggest all the claim limitations.** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Emphasis added).

Independent claim 1 has been amended herein to include the elements of "orienting the first semiconductor die and the at least one second semiconductor die with the active surfaces thereof facing each other with the at least one second semiconductor die covering some bond pads of the plurality of bond pads, other bond pads of the plurality of bond pads remaining

exposed beyond an outer periphery of the at least one second semiconductor die, **by aligning a peripheral edge of the at least one second semiconductor die with an alignment structure disposed on the active surface of the first semiconductor die**” (emphasis added). As amended, claim 1 thus contains elements that are not taught or suggested in Hultmark et al. or Cobbley. Claims 2 through 7, 9 through 16, 41, and 42 depend from claim 1 and similarly include these elements. Accordingly, it is requested this rejection be withdrawn and claims 1 through 7, 9 through 16, 41, and 42 be allowed.

Obviousness Rejection Based on U.S. Patent No. 6,232,667 to Hultmark et al. in View of U.S. Patent No. 6,064,120 to Cobbley and Further in View of U.S. Patent No. 5,477,082 to Buckley, III et al.

Claims 17, 18, 20 through 24, 26 through 34, and 36 through 38 stand rejected in the Office Action under 35 U.S.C. § 103(a) as assertedly being unpatentable over Hultmark et al. (U.S. Patent No. 6,232,667) in view of Cobbley (U.S. Patent No. 6,064,120), “as applied to claim 1 above,” and further in view of Buckley, III et al. (U.S. Patent No. 5,477,082). Applicants respectfully traverse this rejection, as hereinafter set forth.

As discussed previously herein, amended independent claim 1 includes elements not taught or suggested in Hultmark et al. and Cobbley. Buckley, III et al. similarly fails to teach or suggest these elements. Claims 17, 18 and 20 through 22 depend from independent claim 1 and Applicants thus respectfully submit this rejection should be withdrawn and these claims allowed.

Independent claim 23 has similarly been amended to recite “orienting the at least one second semiconductor die over the first semiconductor die with the active surface facing the active surface of the first semiconductor die **by aligning a peripheral edge of the at least one second semiconductor die with an alignment structure disposed on the active surface of the first semiconductor die**, the corresponding bond pads of the first and the at least one second semiconductor dice in alignment with one another,” (emphasis added). Claim 23 thus contains elements not taught or suggested in any of the cited references. Accordingly, Applicants respectfully submit that claim 23, with claims 24, 26 through 34 and 36 through 38 dependent therefrom, should be allowed.

Obviousness Rejection Based on U.S. Patent No. 6,232,667 to Hultmark et al. in View of U.S. Patent No. 6,064,120 to Cobbley and U.S. Patent No. 5,477,082 to Buckley, III et al., and Further in View of U.S. Patent No. 6,317,333 to Baba

Claims 19 and 35 stand rejected in the Office Action under 35 U.S.C. § 103(a) as assertedly being unpatentable over Hultmark et al. (U.S. Patent No. 6,232,667) in view of Cobbley (U.S. Patent No. 6,064,120) and Buckley, III et al. (U.S. Patent No. 5,477,082), as applied to claims 34 and 18 above, and further in view of Baba (U.S. Patent No. 6,317,333). Applicants respectfully traverse this rejection, as hereinafter set forth.

Claim 19 depends from independent claim 1 and claim 35 depends from independent claim 23. As discussed previously herein, amended claims 1 and 23 contain elements that are not taught or suggested in Hultmark et al., Cobbley or Buckley III, et al. Baba similarly fails to teach or suggest these elements. Accordingly, Applicants respectfully request this rejection be withdrawn and claims 19 and 35 be allowed.

Obviousness Rejection Based on U.S. Patent No. 6,232,667 to Hultmark et al. in View of U.S. Patent No. 6,064,120 to Cobbley, and Further in View of U.S. Patent No. 6,100,593 to Yu et al.

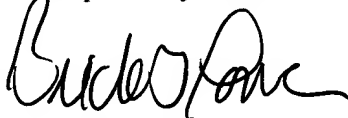
Claims 39, 40, 43, and 44 stand rejected in the Office Action under 35 U.S.C. § 103(a) as assertedly being unpatentable over Hultmark et al. (U.S. Patent No. 6,232,667) in view of Cobbley (U.S. Patent No. 6,064,120), and further in view of Yu et al. (U.S. Patent No. 6,100,593). Applicants respectfully traverse this rejection, as hereinafter set forth.

Amended independent claim 39 includes elements not taught or suggested in Hultmark et al. or Cobbley. In particular, amended independent claim 39 recites providing a multi-chip module which includes first semiconductor die and at least one second semiconductor die, with the at least one second semiconductor die including at least one peripheral edge which is aligned relative to the first semiconductor die by way of an alignment structure disposed on an active surface of the first semiconductor. Buckley, III et al. similarly fails to teach or suggest this element. Claims 40, 43 and 44 all depend from claim 39. Applicants thus respectfully submit this rejection should be withdrawn and claims 39, 40, 43 and 44 be allowed.

CONCLUSION

Claims 1 through 7, 9 through 24 and 26 through 44 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Office determine that additional issues remain which might be resolved by a telephone conference, the Examiner is respectfully invited to contact Applicants' undersigned attorney.

Respectfully submitted,



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